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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,298	11/17/2003	Timothy H. Voss	20595-0005-1	5213

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EXAMINER

HWU, DAVIS D

ART UNIT	PAPER NUMBER
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3752

MAIL DATE	DELIVERY MODE
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02/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/715,298	Applicant(s) VOSS, TIMOTHY H.	
	Examiner Davis D. Hwu	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 16-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation "an unsupported dispenser" is not supported because since the dispenser is connected to a conduit it is "supported" by this conduit. The application will be examined as best understood.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 3752

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 5, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheung.

Cheung shows a dispersal system used with an aircraft comprising a vessel 18 holding a fire suppressant material therein, the vessel being secured adjacent to an aircraft; a dispenser 96 as recited; and a flexible conduit 92 having a first end secured in fluid communication with the vessel and an unsupported second end disposed sufficiently remote from the aircraft, the second end being in fluid communication with the dispenser.

Claim Rejections - 35 USC § 103

7. Claims 1-3, 5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arney in view of Cheung.

Arney discloses a dispersal system used with an aircraft comprising a vessel 1 holding a fire suppressant material therein, the vessel being secured adjacent to an aircraft; a dispenser 53 as recited; and a conduit 51 having a first end secured in fluid communication with the vessel and an unsupported second end disposed sufficiently remote from the aircraft, the second end being in fluid communication with the dispenser; and a release mechanism secured to the aircraft as recited in claim 3. Arney does not disclose a flexible conduit. Cheung teaches a dispersal system for an aircraft comprising a flexible conduit 92 having a first end secured in fluid communication with a container and an unsupported second end in fluid communication with the dispenser 53. It would have been obvious to one having ordinary skill in the art at the time the

Art Unit: 3752

invention was made to have modified the device of Arney by using a flexible conduit since such an arrangement has been taught by Cheung. The conduit extending from about 50 feet to about 150 feet below the aircraft would have been a matter of design choice since such a modification would have involved a mere change in the length of suspending lines 11.

8. Claims 2, 8, 9, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung.

The conduit extending from about 50 feet to about 150 feet or 300 feet below the aircraft would have been a matter of design choice since such a modification would have involved a mere change in the length of the conduit which is generally recognized as being within the level of ordinary skill in the art. The dispenser including a pair of nested housing would have been a matter of design choice since it has been held that a mere duplication in the essential working parts of a device involves only routine skill in the art.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung in view of Willis.

Willis teaches a dispenser 1 comprising a plurality of vanes 6. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Cheung by replacing the dispenser with a dispenser having a plurality of vanes as has already been taught by Willis.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung in view of Bockenstette, II.

Art Unit: 3752

Bockenstette, II teaches a rotating atomizer nozzle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Cheung by using a rotating dispenser as has already been taught by Bockenstette, II.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung in view of King.

King teaches a dispersal system for fire suppression material for use with an airborne craft comprising a vessel 4 holding fire suppressant and a conduit 19 having a first end secured in fluid communication with the vessel and a second end for controllably directing the dispensed material adjacent to ground level in which the conduit has a valve 21 in the second end of the conduit to control dispensing of the material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Cheung by incorporating a valve into the second end of the conduit to control the spray as taught by King.

12. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung in view of Baker et al.

Baker et al. teaches a dispersal system for fire suppression material from an aircraft comprising a vessel 12, a dispensing head 40 and a shroud 30 surrounding the head 40 to act as a physical guard for the head 40. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Cheung by providing a shroud to surround the valve and dispenser head as taught by Baker et al. to provide protection for the valve and dispenser head. The shapes recited

Art Unit: 3752

in claims 14 and 15 would have been matters of design choice since such modifications would involved a mere change in the shape of an object which is generally recognized as being within the level of ordinary skill in the art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Davis D Hwu/
Primary Examiner, Art Unit 3752